Choosing a PDA

A Technology Tipsheet from NN/LM SCR
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The Personal Digital Assistant (PDA) is becoming as much a part of the health care provider's standard uniform as the stethoscope or scrubs. As health care becomes increasingly knowledge-intensive, effective practitioners begin to look to tools such as PDAs as "supplemental brains" that they can use not only for reference and consultation of expert resources, but also as capture mechanisms that allow them to "offload" the myriad details they need to remember, store and recall on a daily basis about their practice, their patients, and their own personal lives.

The PDA marketplace offers quite an array of choices, in terms of manufacturers, design principles, and features. Prices for a PDA that can be very functional for a health-science student or practitioner can begin around $100 – but at the high end, can exceed $1,000. In such a varied marketplace, how can you choose wisely to ensure your PDA will meet your needs without breaking the bank? The key lies in the questions you ask yourself before you start shopping. Here are some suggestions:

❶ *What am I prepared to spend?* Starting your search with a price range in mind helps you to focus in on which features are most important to you. The end result will be that you will be less likely to "fall into" purchasing a PDA that has far more or far fewer features than you really need – so you're more likely to get the most for your money. If you're considering a PDA with an integrated phone or mobile-data connectivity, be sure you are considering not only the purchase price but the ongoing monthly subscription cost as well.

❷ *Are there specific applications I want/need to use?* Most PDAs will come with a relatively similar set of built-in/pre-installed software: a Calendar/Datebook program, a Contact List program, a Tasks/To-Do List program, and a Notes/Memo program. The key to a PDA's usefulness, however, is what **additional** applications are available for you to install on the PDA to support your day-to-day needs. If you already know of specific applications that are required or recommended for your studies or practice, you should start by identifying those. To think about what other applications you might want to use, take a look at some of these:

- Your local health-science library may offer a guide to PDA software, like the one my library offers at http://www.library.uthscsa.edu/find/pdas.cfm
- You can also take a look at sites such as http://palmdoc.net, http://pdacortex.com, or http://pdamd.com for health-related PDA apps
- Sites such as http://handango.com or http://pocketgear.com offer directories of general apps.
- For the iPhone, all apps are available through the iTunes App Store – see http://www.apple.com/itunes/whatson/appstore.html for more information.

❸ *What operating system(s) should I consider?* The operating system (OS) is the underlying software that runs your PDA device. Take a look at the applications on your list from #2 at left, and find out what operating system(s) they are compatible with. Prior to 2008, almost all third-party PDA applications, especially in the health sciences, were built for either Palm OS, or Windows Mobile (previously called Pocket PC), or both. Since mid-2008, however, the number of third-party applications available for the iPhone or iPod Touch has increased enormously, including applications for the health sciences, so that OS platform is quickly catching up with the others.

Besides looking at application compatibility, you may also want to try out PDAs or devices on the different operating systems to see which one feels most comfortable and usable for you. One other specific note regarding Windows Mobile and PDA phones: make sure that the device you are selecting actually has a touch screen that you control either with your finger, or with a "stylus," or both. Some Windows phones use a "light" version of Windows Mobile called "Smartphone Edition" or "Standard Edition" that does not include touch-screen control; **many** of the main health-science applications for Windows Mobile **will not run** on those versions of Windows Mobile. The versions of Windows Mobile that **are** more likely to run useful health applications are called "Pocket PC Edition," "Phone Edition," "Classic," and "Professional".

❹ *How do I want to connect my PDA to the Internet?* Today, a PDA can be your 24x7 window to the Internet, email, and other forms of online communication – but **only** if you can count on that Internet connection to be available to you when and how you need it. Some PDAs offer the ability to connect to Wireless Internet (Wi-Fi) networks or hotspots; these tend to be fast connections, but you'll want to think about whether the areas you need Internet connectivity have Wi-Fi available – your campus, hospital, clinic, favorite coffeeshop or your home. If you need broader coverage, then a PDA with a phone or mobile-data plan is an option, as long as you make the investment to get an unlimited data plan with your subscription (anything short of unlimited has the potential to be frustrating and expensive if you really make use the Internet). With that kind of connectivity, anywhere you have cell-phone "signal" you will also have an Internet connection. Finally, some new devices like the iPhone offer the best of both – the ability to use a Wi-Fi connection when one is available, but the ability to dynamically switch to the cellular/mobile-data network when Wi-Fi is not available.

❺ *Additional Features to Consider.* Here are a few of the features that vary quite a bit from one PDA to another. Consider which of these are very important to you and what you want to do with your PDA, and which are not useful or important at all:

Display -- depending on your needs, the size of the display may be important, as may the resolution (detail/sharpness) of the image, and/or the brightness of the display. For medical imaging applications, for example, high resolution and large screen size can be particularly important.

Data input -- to enter data on the old Palm devices, you had to learn a special "alphabet" of stylus motions to enter "letters" into the PDA, or you would type them out with the stylus on an on-screen keyboard. Blackberry devices introduced the "thumb keyboard" which many found more usable and similar methods were adopted by other vendors as well. The iPhones use an on-screen keyboard designed to be tapped with the fingers. For some devices, foldable external keyboards are also available (but that's something else you'd need to carry around). Try out the different options and see which ones you find particularly natural or particularly frustrating.

Size/form factor -- To be a useful tool, a PDA has to be convenient and right at hand for you all the time. Will you carry yours in a purse, on a belt clip, in a pocket? Whatever the case, decide which ones have a size, shape and weight that works for you so you can have it with you all the time. If it's too clunky, you'll leave it behind -- and then it won't do you any good.

Battery life -- If you are able to establish a regular schedule that allows you to charge your PDA as necessary -- i.e. at home, at your office, or in your car -- this may not be a big deal, as long as it has enough battery life to last between those regular charges. If your schedule is more irregular, longer battery life becomes more important.

Built-in memory and expansion slots -- This is most important if you plan to load a lot of large applications, reference databases, photos, video, audio files or even e-books onto your device. How much internal memory does it have to hold those media files? If you need more, can you buy a standard card (like you would for a digital camera) to expand its memory, or are you limited to what it comes with?

Phone -- discussed in section #4 above; depends on your needs.

Camera -- not only **whether** the PDA comes with one, but the quality and features of the camera if it has one. A camera can be an excellent note-taking and memory-aiding device, if the quality of the photos meets your needs (for example, do close-up photos show enough detail for them to be useful?).

Voice recorder -- another very handy way to capture notes or reminders, even when you can't write them down. Not all PDAs have this capability. Would you be likely to use it or not?

MP3/digital audio player -- if you're interested in combining your PDA with your MP3 player -- or if you don't have one and you'd be interested in subscribing to or listening to podcasts, recorded lectures, music, etc., this may be useful.

GPS -- another feature available on some PDAs that certain people find extremely important and useful. A GPS (Global Positioning System) receiver allows your PDA to plot your current position on an on-screen map, and can provide directions to your destination if you need them.

❻ *Support.* There are several types of formal and informal support you should consider when purchasing your PDA:

Manufacturer support. Is the manufacturer warranty sufficient, and does the manufacturer have a good reputation for service after the sale? Is it easy to find help and information on the manufacturer's support website?

Other vendor support. Can you get additional support from the retailer where you purchase the PDA? If your PDA includes a phone, does the wireless carrier have a good reputation for supporting its phones and services?

Your own IT department. If you are a student or teacher, what types of PDAs does your institution's IT department support? If you are a clinician, what types of PDAs are supported by the IT departments at the hospitals or clinics where you may need support? If you want to be able to get Wi-Fi connectivity, or receive email on your PDA, or many other similar tasks, you will probably need to work with your institution's computer help desk– be sure to check with them to find out what they can help with.

Your colleagues. Over time, you will find that some of the most valuable tips and ideas you will gather about using a PDA to its fullest potential will come from your friends and colleagues. However, if their PDAs are all very different from yours, the amount of benefit you can get from those suggestions may be limited. Talk to your friends and colleagues before who use PDAs before you purchase – find out what they recommend, and what they find most useful about their own PDAs.